Rationale and Background

Section I. Self-care in the U.S. Army

The health and well-being of Military Health System (MHS) beneficiaries is closely linked with the personal responsibility to take care of oneself. Self-care emphasizes the importance of accepting this personal responsibility for preventing disease and non-battle injury. Self-care also involves the processes of education and empowerment. This knowledge includes awareness of types of treatment needed for common, minor health conditions, as well as awareness of when the services of a health care provider are required. The combination of avoiding illness through prevention and personal responsibility for self-care will help each individual to achieve more in their military career and to live life more fully.

Self-care is a core component for optimization of the MHS. Dr. H. James T. Sears, Executive Director, TRICARE Management Activity, has selected self-care as a primary activity of TRICARE. The basis for a self-care program is also supported by Army Regulation (AR) 40-3 (*Medical, Dental and Veterinary Care*).

The Consolidated Troop Medical Clinic BCT Self-care Intervention Program at the General Leonard Wood Army Community Hospital (GLWACH) was developed and implemented in 1997. Since its implementation, almost all Initial Entry Training (IET) soldiers attending their initial military training at Fort Leonard Wood have participated in the self-care program. A total of 77,916 IET soldiers were enrolled and educated in self-care principles from January 1998 through May 2000. During this same time period, the self-care pharmacy was used 17,839 times.

The GLWACH Self-care Program was funded by the Health Promotion and Prevention Initiatives Program (HPPI) through the US Army Center for Health Promotion and Preventive Medicine (USACHPPM). The program produced the following outcome data for the period of January 1998 through May 2000:

• Avoidance of lost duty time: 33,894 hours.

• Avoidance of provider visits: 17,839.

• Provider time saved: 5,946 hours.

In addition, no adverse outcomes were reported by health care providers, such as drug overdose, drug toxicity, or delay in obtaining medical treatment for serious health conditions.

The basic goals and objectives of the self-care program as implemented at Fort Leonard Wood include:

- Promotion and development of health care consumer skills.
- Advancement of the philosophy that personal health care is a joint responsibility of each IET soldier and the MHS.

- Reduction of training time lost to health care provider encounters at the TMC.
- Reduction in the demand for treatment of common, minor health conditions.

The self-care class is usually taught during the first week of IET. This class teaches the individual to take responsibility for his or her own health. In addition to the philosophical aspect of preventive medicine, IET soldiers learn basic identification of common, minor health conditions. Thereafter, when symptoms of illness or injury are present, the soldier may choose to use the self-care option to receive appropriate health care.

When common "home" remedies do not relieve symptoms, or common remedies and over-the-counter (OTC) medications are needed, the IET soldier completes a form prior to arrival at the TMC describing the health condition and then chooses OTC medications for self-care treatment. Upon arrival at the TMC, the soldier is triaged and screened by a medic for a temperature above the established threshold for that facility. Those with temperatures above this standard are referred to the regular TMC sick call line. Those passing this initial medical triage are allowed to proceed to the pharmacy self-care line.

The pharmacy technician reviews the medication request for appropriateness regarding stated symptoms and also verifies the date and type of previous self-care OTC medications. If the pharmacy technician notes an unacceptable frequency of requests for self-care OTC medications, the IET soldier is referred back to the regular TMC sick call line. However, if the reviewing pharmacy technician agrees with the self-care OTC medication request, the IET soldier receives the requested OTC medication and returns to his or her unit.

Steinweg, Killingsworth, Nannini, and Spayde (1998) conducted a study of the self-care program implemented at Fort Leonard Wood using pretest-treatment-posttest instruments. The treatment group was given self-care instruction and had the option of taking advantage of the entire self-care process. The control group received no self-care education and continued to use the TMC as usual. Results indicate that not only did IET soldiers in the intervention group spend less time within the TMC, but these soldiers also returned to training more quickly. A survey of the intervention group found that the majority of IET soldiers rated the self-care program as beneficial. A majority of soldiers also believed that they had become wiser health care consumers.

This study of the self-care program at Fort Leonard Wood yielded the following positive results:

- Increased knowledge of personal health issues (84.3 percent).
- Increased confidence to treat minor illnesses (77 percent).
- Increased practice of healthy behaviors (64.9 percent).
- Increased commitment to seek preventive medicine (62.8 percent).

In addition, 72 percent of self-care program participants reported avoiding at least one clinic visit, and 39.8 percent reported avoiding at least one emergency room visit. The

calculated return on investment (ROI) was eleven-to-one (11:1). The ROI of each facility's self-care program may vary, since the program will be implemented under different circumstances.

The self-care program at Fort Leonard Wood has enabled the U.S. Army to begin educating soldiers about matters relating to health and the Army Medical Department when they enter active duty. The nine-week schedule of initial entry training leaves few opportunities to make up lost training time. As shown by the study at Fort Leonard Wood, the self-care program allows IET soldiers to return to regular training much sooner than a non-self-care TMC visit would allow. Additionally, as non-essential visits to the TMC are decreased, TMC personnel can give more attention to those soldiers who have a more urgent need for professional medical care.

Section II. Self-care Among Civilians

Although self-care has been used for centuries, the impact of self-care interventions was not thoroughly investigated until the 1980s. Four studies conducted in health maintenance organization (HMO) environments demonstrated a reduction in health care services after the implementation of a self-care program. The first study by Moore (1980) demonstrated a 21 to 24 percent decrease in physician office visits. A second study by Kemper (1982) showed an 11 percent decrease in clinic visits and a 35 percent decrease in referrals to physician specialists, but no reduction in total costs. A third study by Vickery (1988) demonstrated a savings of \$30.29 per person within a Medicare population group. Finally, Leigh (1992) found that claims decreased by \$74 per person in the experimental group, while costs increased \$266 per person for the control group.

According to the American Hospital Association, Americans went to the hospital emergency department 97.4 million times in 1993. The Centers for Disease Control and Prevention estimated in 1994 that 55.4 percent of these emergency department visits were for non-urgent conditions such as headaches, sore throats, and stubbed toes. Resources are needlessly expended in these cases, as the cost for hospital emergency department treatment is three to four times higher than would be a primary health care provider's fee for the same treatment.

Beyond these unnecessary emergency department visits, many individuals also seek professional health care for problems that could be treated at home using self-care. According to a National Ambulatory Medical Care Survey in 1992, approximately 762 million visits (about three visits per person per year) were made to non-federally employed, office-based physicians (Schappert 1994). Estimates are that one quarter of these visits (190.5 million) were unnecessary.